

# SECTION EF

<b>EMISSION CONTROL SYSTEM .....</b>	<b>EF-2</b>	LPG device (Specifications for LPG	
<b>ENGINE OUTSIDE DRAWINGS .....</b>	<b>EF-3</b>	and combined use) .....	EF-13
<b>SYSTEM DIAGRAM .....</b>	<b>EF-4</b>	<b>DISASSEMBLY AND ASSEMBLY OF</b>	
K-Engine Electronic Controlled System		<b>INJECTOR HOLDER .....</b>	<b>EF-15</b>
Diagram (Gasoline) .....	EF-4	LPG Fuel injector .....	EF-15
K-Engine System Diagram (LPG) .....	EF-5	LPG Assist fuel injector .....	EF-16
K-Engine System Diagram		LPG Fuel pressure sensor .....	EF-16
(Combined Use) .....	EF-6	Relief valve (2 relief valves) .....	EF-16
<b>UNIT LAYOUT .....</b>	<b>EF-7</b>	Cleaning / Replacement of LPG filter of	
<b>SERVICE DATA AND</b>		Valve assy solenoid LPG .....	EF-17
<b>SPECIFICATIONS (SDS) .....</b>	<b>EF-8</b>	Cleaning LPG filter screen in	
Electronic Control System Specifications .....	EF-8	injector holder .....	EF-17
<b>LPG FUEL SYSTEM TROUBLE</b>		Vaporizer Mechanism and Operation .....	EF-18
<b>DIAGNOSIS .....</b>	<b>EF-9</b>	<b>DISASSEMBLY AND ASSEMBLY</b>	
<b>DISASSEMBLY AND ASSEMBLY</b>		<b>OF VAPORIZER .....</b>	<b>EF-20</b>
<b>OF FUEL SYSTEM .....</b>	<b>EF-10</b>	Tar drain, Removal, Installation,	
Removal and Installation of Electronic		Disassem-bly and Inspection	
Control Throttle Assembly .....	EF-10	of Vaporizer .....	EF-20
Removal and Installation of Gasoline			
Fuel Injector (Electronic Controlled			
Gasoline and Combined Use) .....	EF-11		

**NOTE:** This section contains information and specifications for both carbureted general overseas market (GOM) models, as well as, electronic control models (manufactured in USA). Therefore, ensure the specifications or procedures you are looking at are for the proper fuel delivery system; electronic controlled or carbureted.

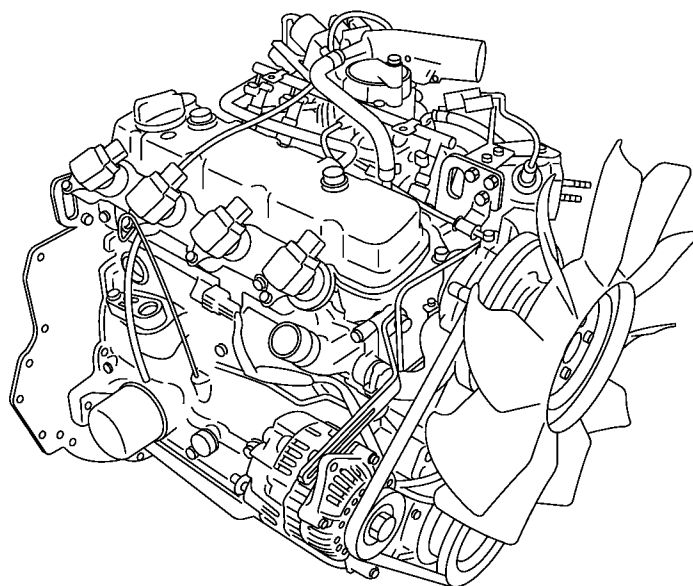
## EMISSION CONTROL SYSTEM

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Engine type		K21, K25
Standard type of fuel device	Gasoline	Electronic controlled fuel injection device (Multi-point injection)
	LPG	Electronic controlled fuel injection device (Single point injection)
Air-fuel ratio control type		Air-fuel ratio feedback control
Starting auxiliary device		Electronic controlled fuel injection
Ignition device		Ignition coil electronic controlled distributor integrated with power transistor for each cylinder
Catalytic device		Three-way catalyst (Monolith)
Braking device		With fuel cut device
PCV gas recirculation device		Closed type

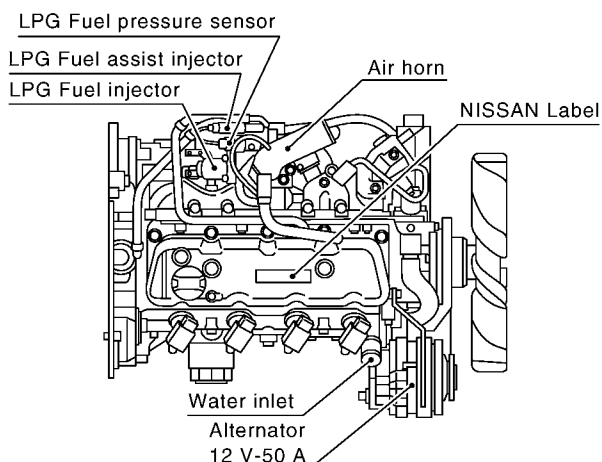
# ENGINE OUTSIDE DRAWINGS

## ELECTRONIC CONTROLLED SPECIFICATION



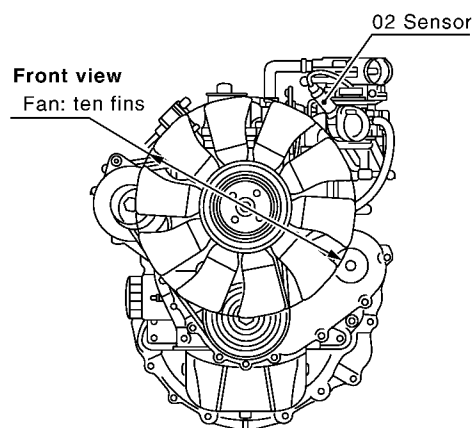
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### Plan view

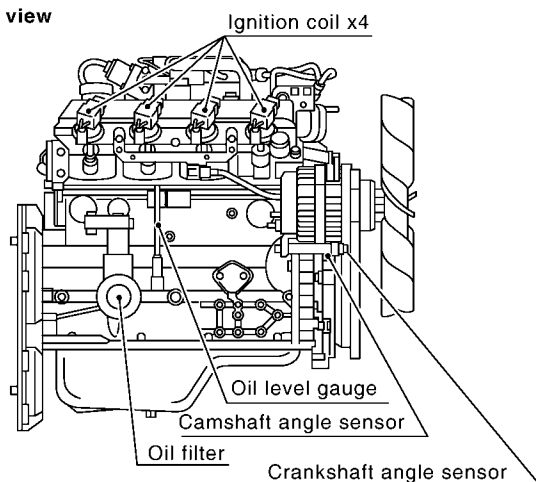


### Front view

Fan: ten fins

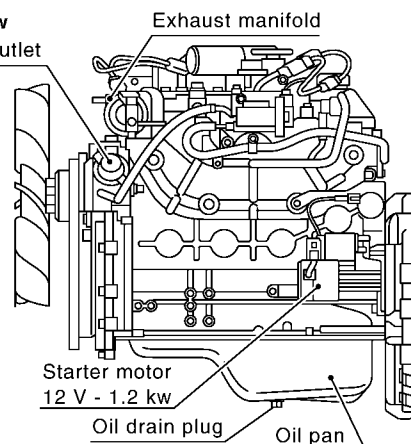


### Left view



### Right view

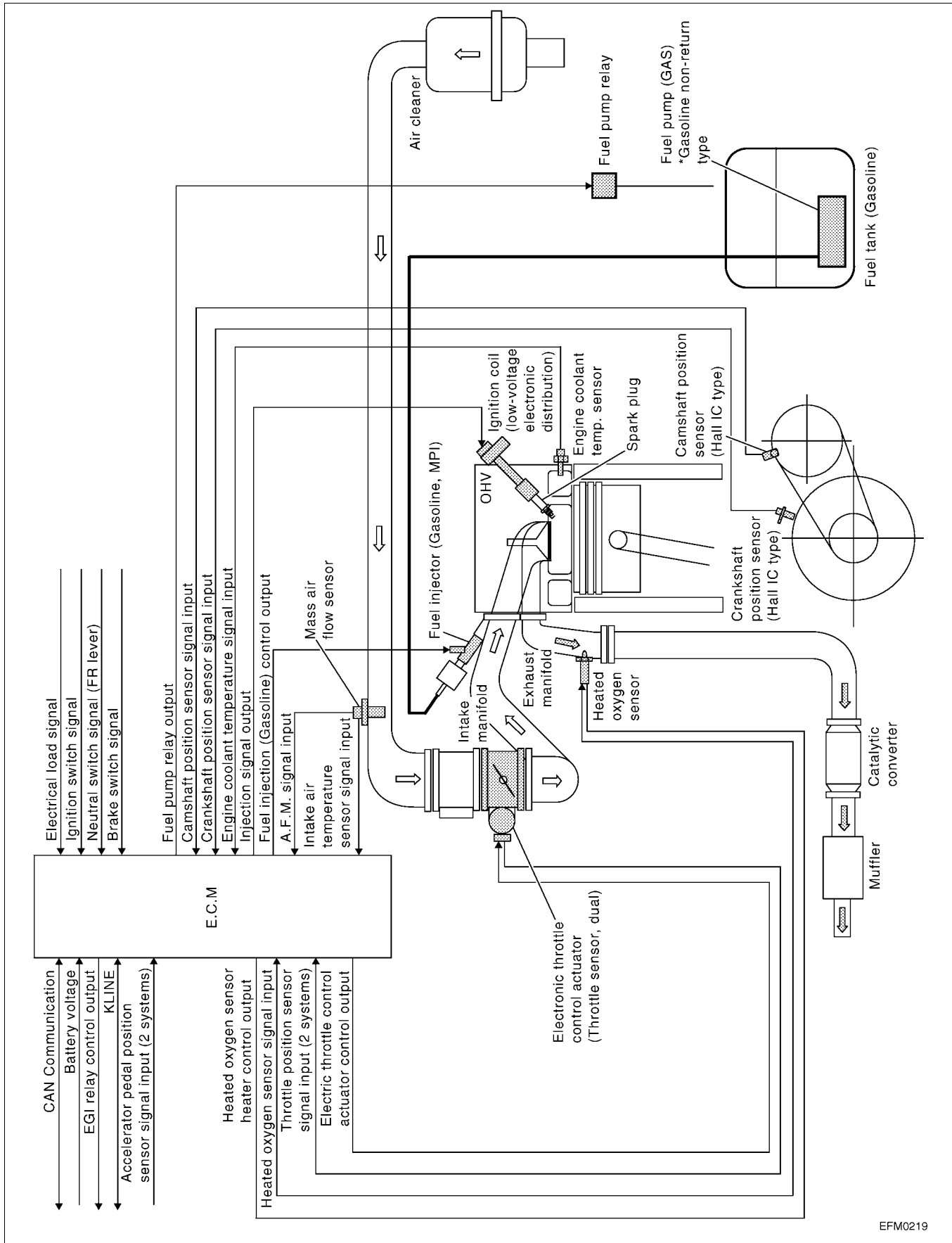
Water outlet



GIM0147-2eu

# SYSTEM DIAGRAM

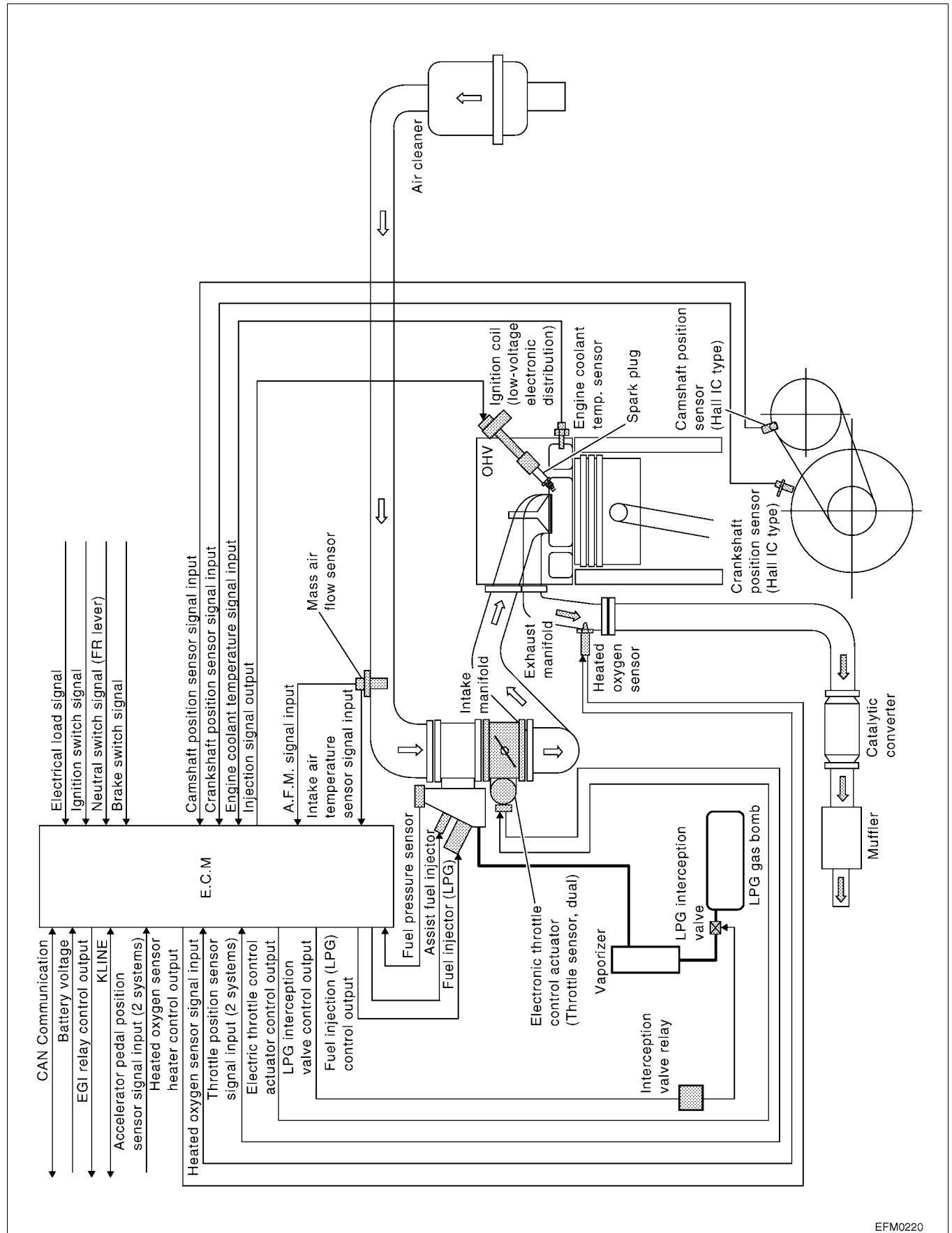
## K-Engine Electronic Controlled System Diagram (Gasoline)



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# SYSTEM DIAGRAM

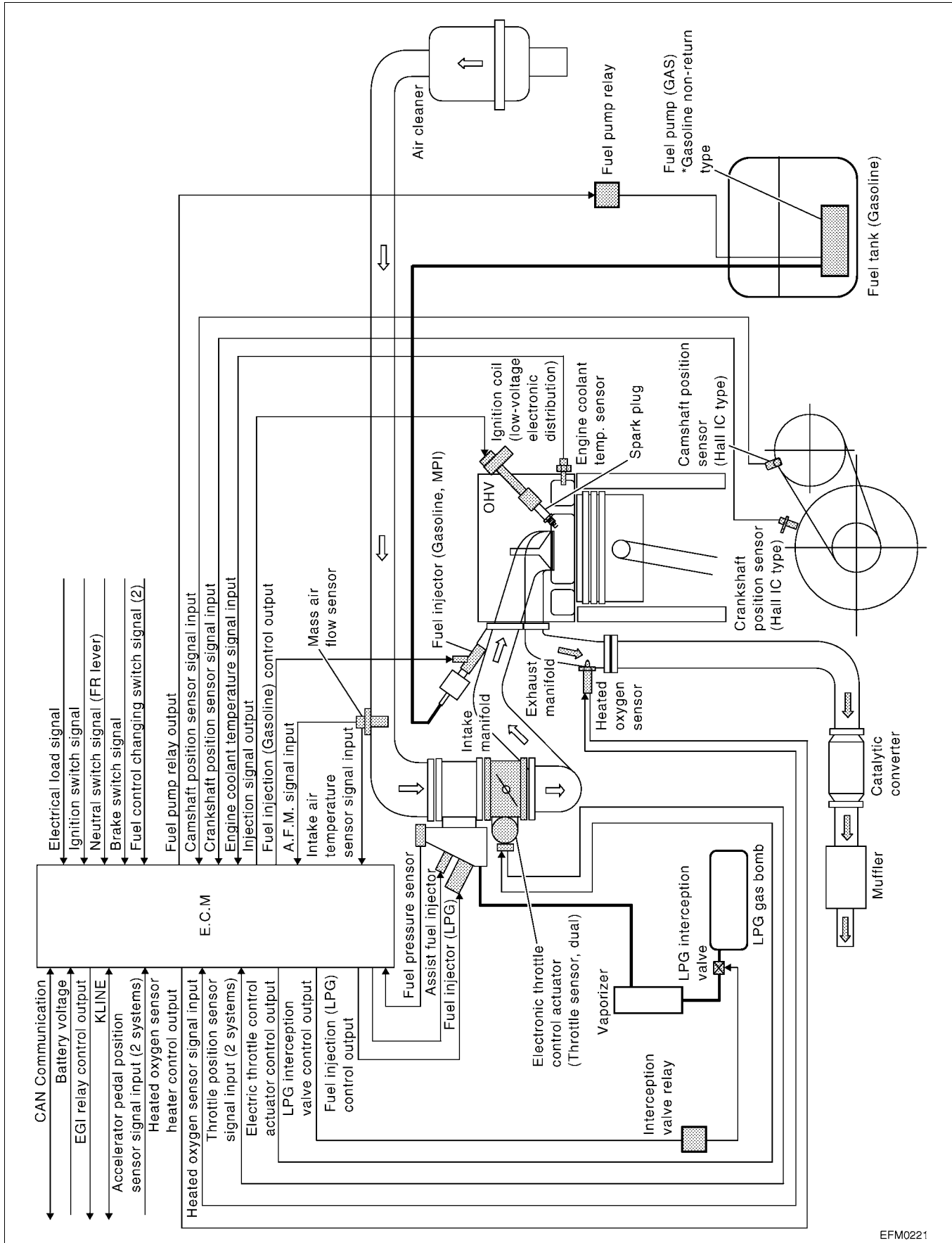
## K-Engine System Diagram (LPG)



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# SYSTEM DIAGRAM

## K-Engine System Diagram (Combined Use)

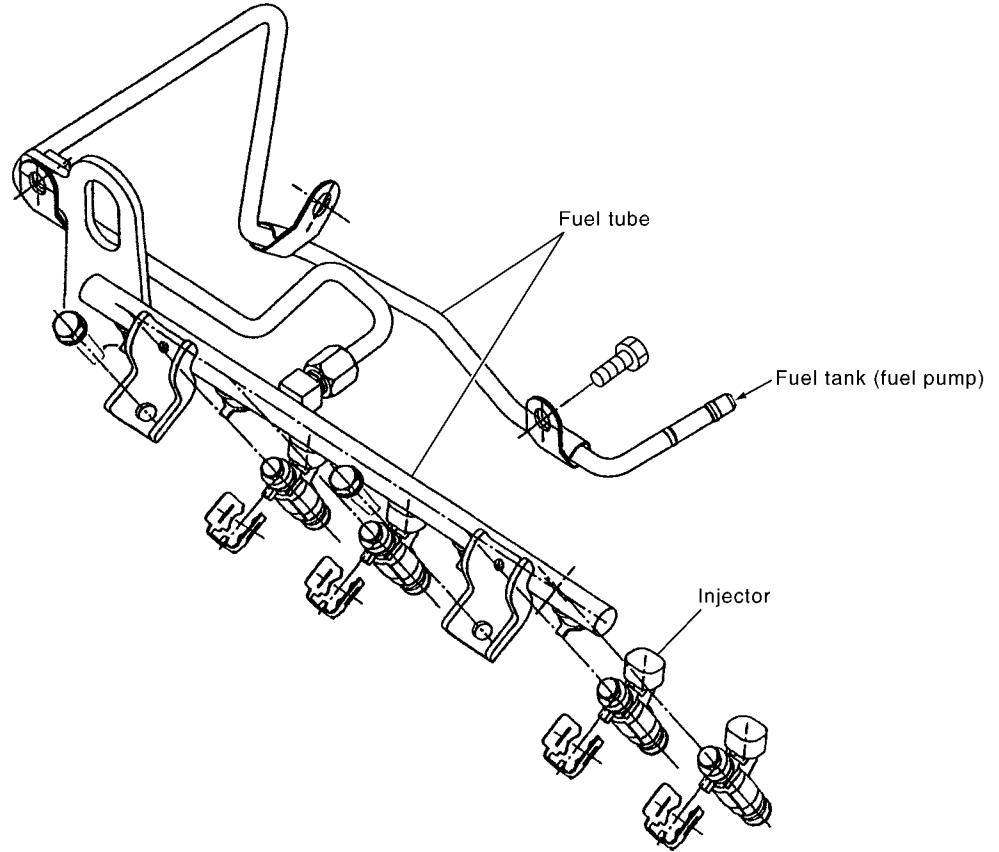


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# UNIT LAYOUT

## FUEL PIPING DIAGRAM

Electronic control type  
(Gasoline)



EFM0222

### Electronic Control System Specifications

Gasoline electronic injection (injection from each cylinder port)

LPG electronic injection (injection from single point on this side of electric throttle control actuator)

Vaporizer (water heater) ..... Fuel discharge pressure: Approx. 31.9 kPa (0.31 bar, 0.33 kg/cm<sup>2</sup>, 4.6 psi)

Throttle body and injector holder bolts tightening torque (Air horn also secures.)

M6 bolt [thread length: 90 mm (3.54 in)]: 11.8 - 13.7 N·m (1.2 - 1.4 kg-m, 9 -10 ft-lb)



# LPG FUEL SYSTEM TROUBLE DIAGNOSIS

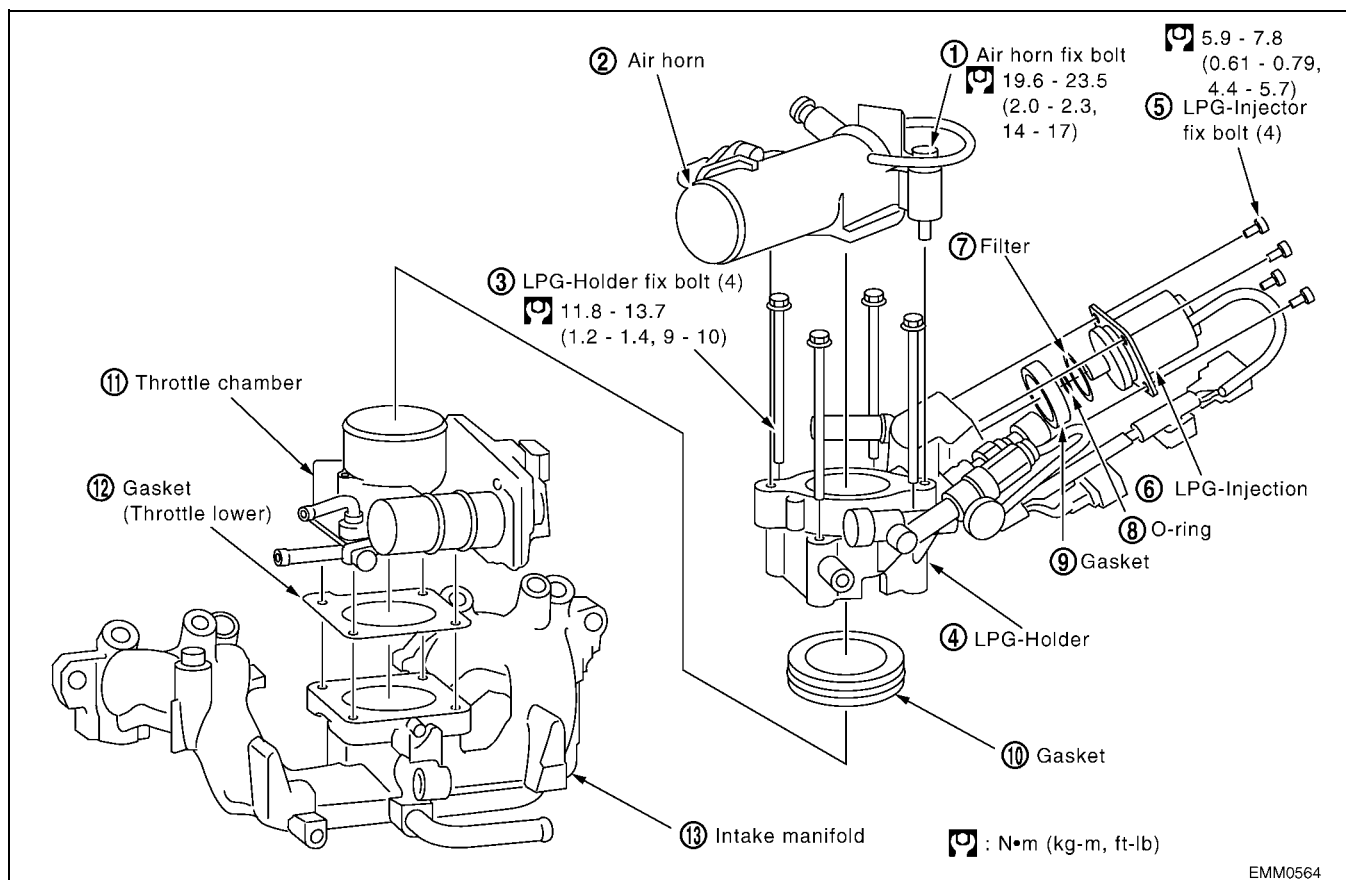
Condition	Cause	Action
Fuel leakage	Looseness of piping connection	Tighten
	Operating malfunction of vaporizer	Repair, adjust or replace
	Poor connection or some foreign object is caught in between plunger rubber seat and valve seat of solenoid valve	Clean, rub or replace
Excessive fuel consumption	Looseness of piping connection	Retighten and adjust
	Primary chamber side pressure at idle is excessively high	Wash, adjust or replace
Low output	Operating malfunction of vaporizer	Repair, adjust or replace
	Looseness of piping connection or clogged filter	Clean, additionally tighten or replace
	Adjusting malfunction of primary chamber pressure of vaporizer	Adjust or replace
	Use of improper fuel	Use proper fuel
	Engine coolant temperature is excessively high	Investigate and repair the cause of rise of the engine coolant temperature
	Clogged fuel passage	Clean
	Clogged air cleaner	Wash
Inconsistent or rough idle	Operation malfunction of electric throttle control actuator	Replace
	Operation malfunction of LPG injector	Clean or replace
	Operating malfunction of vaporizer	Repair, adjust or replace
	Operating malfunction of vaporizer valve (It is closed improperly.)	Clean, adjust or replace
	Looseness of vacuum hose	Connect proper vacuum hose
Engine hesitation or hunting	Operating malfunction of vaporizer	Repair, adjust or replace
	Adjusting malfunction of idle speed	Adjust (Refer to Idle Air Volume Learning; EC section.)
	Operation malfunction of LPG injector	Clean or replace
Poor starting engine	Insufficient fuel	Refill fuel
	Operating malfunction	Check that LPG tank manual valve is opened
	Operating malfunction of solenoid valve	Check and repair of wiring, switch and solenoid valve
	Operating malfunction of vaporizer	Repair, adjust or replace
	Blown fuse for LPG injector	Replace
	Operation malfunction of LPG injector	Clean or replace
	LPG injector control signal malfunction	Check harness and ECM
	Adjusting malfunction of idle speed	Adjust (Refer to Idle Air Volume Learning; EC section.)
Operating malfunction of vaporizer	Adjusting malfunction of primary chamber pressure of vaporizer	Adjust or replace
	Leakage from primary valve seat of vaporizer	Clean, adjust or replace
	Foreign materials enter vaporizer inside	Clean, adjust or replace
	Leakage by looseness of setscrew	Tighten
	Overcool of vaporizer (Scale deposit, damage of hose, poor coolant circulation)	Check, wash and adjust
	Tar deposit in valve	Remove tar and clean

## Removal and Installation of Electronic Control Throttle Assembly

### REMOVAL

1. Remove air duct.
2. Remove harness connector. (Mass air flow sensor, LPG injector, LPG assistance injector, LPG fuel pressure sensor and electric throttle control actuator)
3. Loosen air horn bolts in turns, and then remove them.
4. Loosen injector holder bolts in turns, and then remove them.
5. Also loosen chamber bolt of electronic control throttle, and then remove the chamber.

### ELECTRONIC CONTROLLED SYSTEM COMPONENT VIEW



## Removal and Installation of Gasoline Fuel Injector (Electronic Controlled Gasoline and Combined Use)

### PREPARATION

- Air hose
- Moving engine harness connector

### REMOVAL AND INSTALLATION OF FUEL HOSE

#### Removal

- Release the fuel pressure. Refer to "Release of Fuel Pressure" in EC section.



After removal, plug the fuel hose to prevent the fuel from draining.

#### Installation

- Insert hose until its end reaches 25 mm (0.98 in) or more from fuel tube end. Install a clamp and securely tighten it. Do not install the clamp on top of the bulge.
- Start engine, increase the engine speed, and make sure that there is no fuel leakage after repairing.

### REMOVAL AND INSTALLATION OF FUEL TUBE AND FUEL INJECTOR

#### Removal

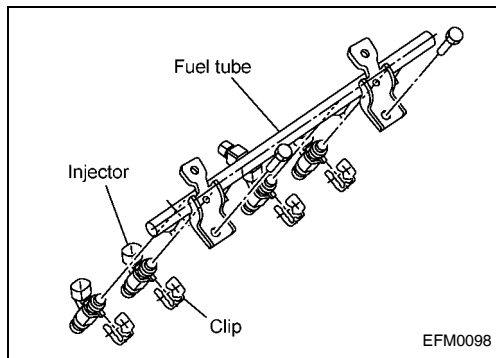


Fuel remaining in the tube leaks during operation. This operation should be done in a place free from fire.

- Remove fuel gallery bolt.
- Remove fuel gallery. Remove fuel injector and fuel gallery as a set.
- Remove clips (4) using long-nose pliers. Disconnect fuel injector and fuel gallery.



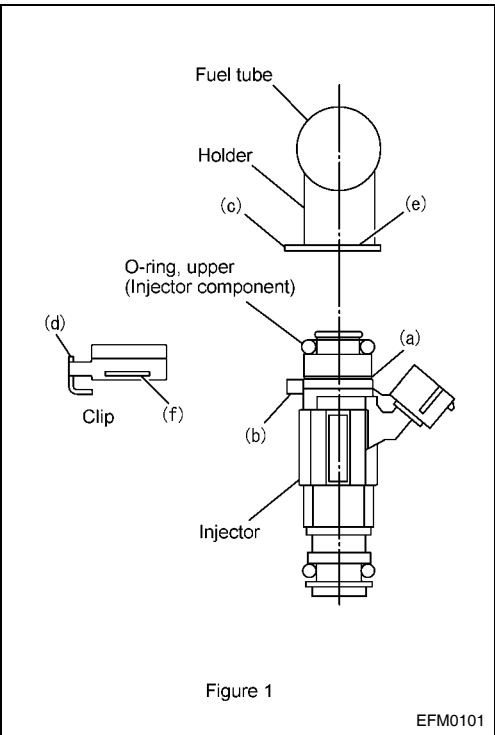
Do not reuse clips.



## INSTALLATION OF FUEL INJECTOR

## Precautions for installation of fuel injector

12. Make sure that fuel injector is securely installed without rotation and disconnection after installing to fuel tube.



### LPG device (Specifications for LPG and combined use)

Inject the proper amount of fuel supplied from vaporizer based on ECM command.

#### COMPONENT PARTS LOCATION

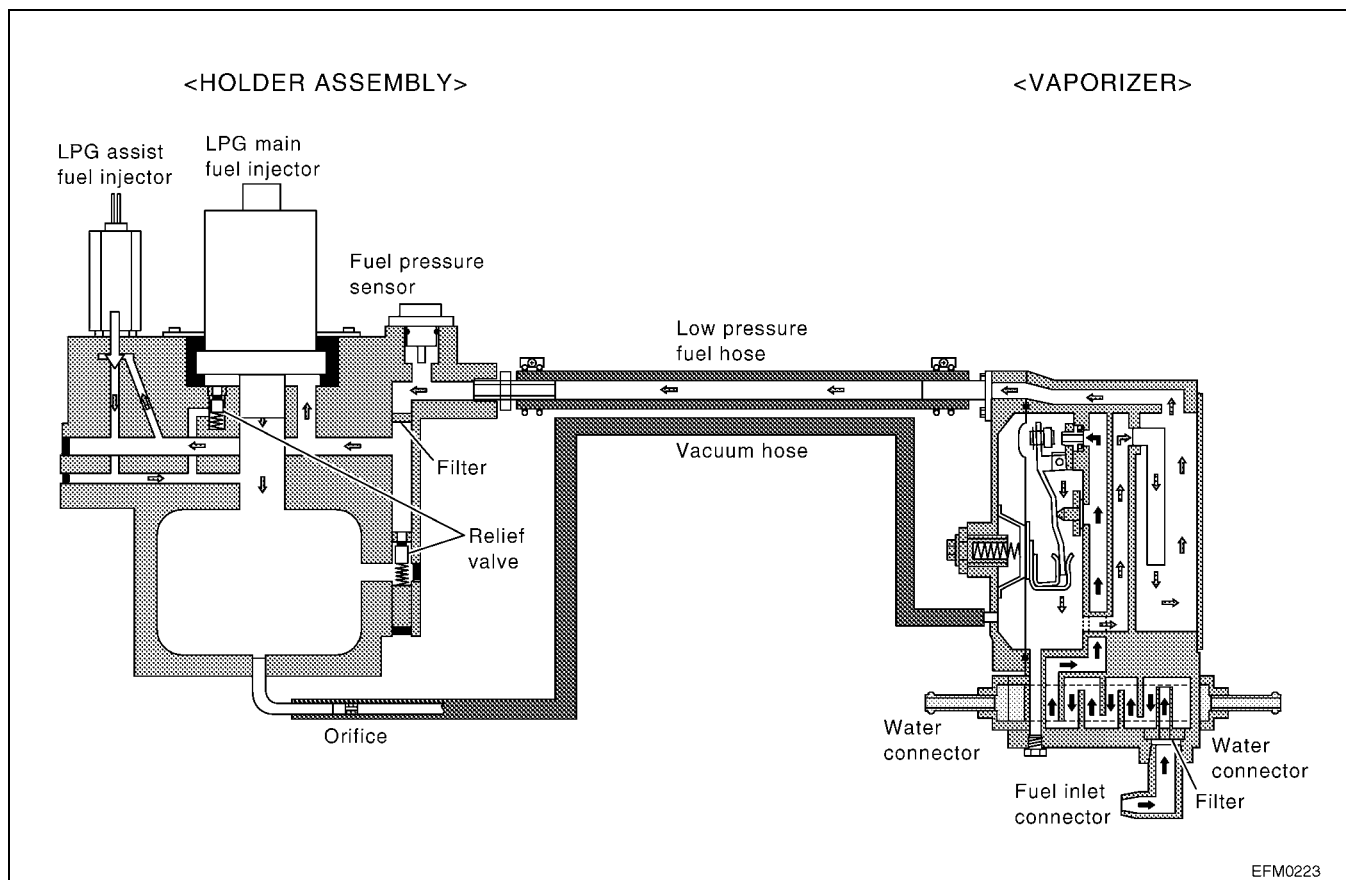
It includes mechanical relief valve with LPG injector, LPG assistance solenoid valve, and fuel pressure sensor.

It is composed of injector holder and drive unit. The drive unit operates vaporizer and injector that depress and perform carburetion of high-pressure fuel flow from LPG tank to approximately 29 kPa (0.29 bar, 0.3 kg/cm<sup>2</sup>, 4 psi).

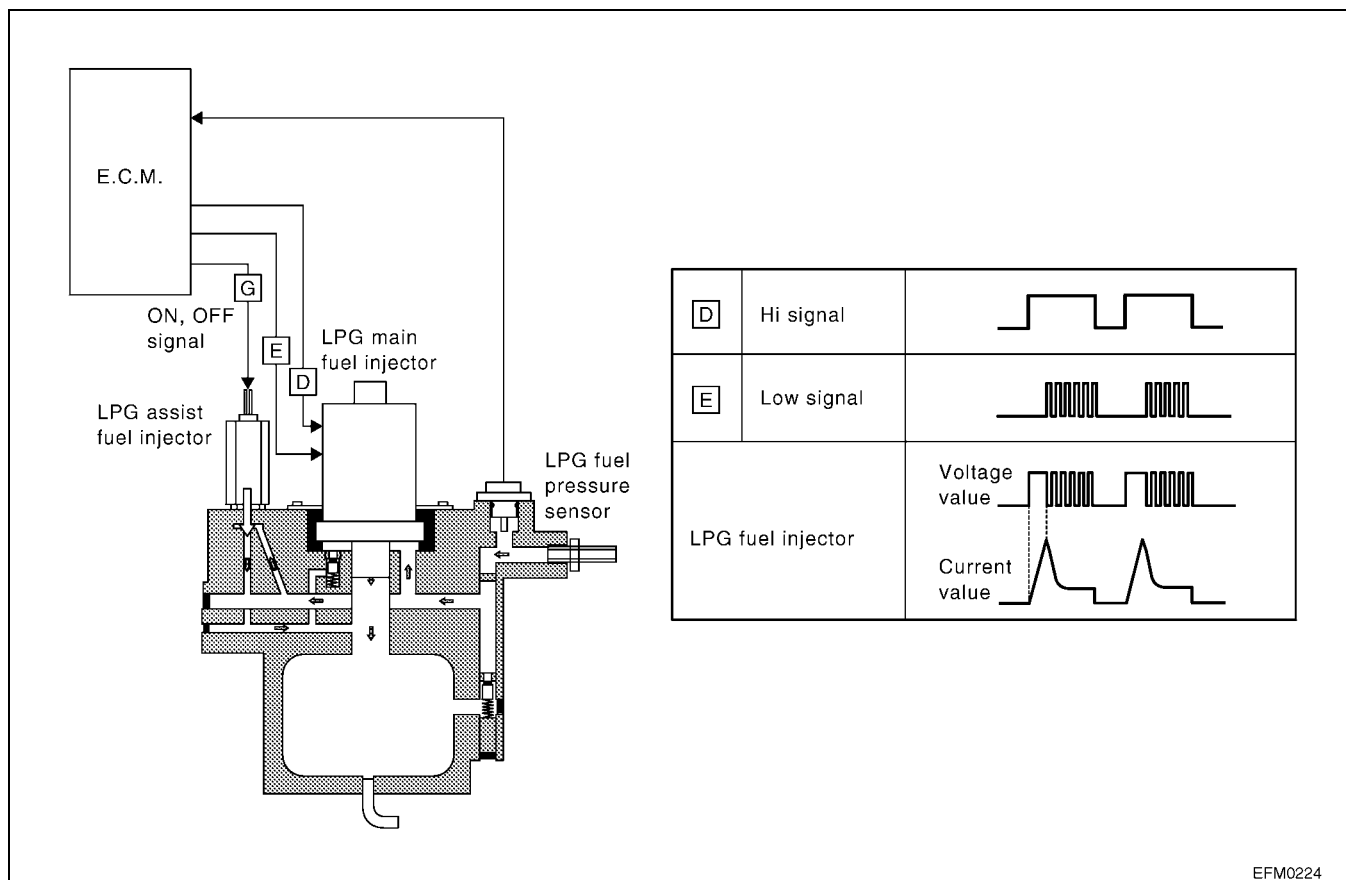
- (1) LPG injector  
It is used for LPG gas injection.
  - (2) LPG assistance solenoid valve  
Engine output may be insufficient in high-speed and high load area when using LPG injector only. LPG assistance solenoid valve helps LPG injector to keep maximum engine output in high-speed and high load area.
  - (3) Fuel pressure sensor  
Sends a signal to control fuel injection at low fuel pressure (e.g. in low temperature).
  - (4) Mechanical relief valve  
Operates when fuel pressure is over set pressure. It opens fuel circuit, and sends fuel to intake manifold, and protects fuel piping at lower fuel pressure. It is provided in holder fuel passage.
- Repair each component specified in (1), (2), (3), and (4) as an assembly if a malfunction is detected in the above components. Refer to EC section for inspection procedure.

# DISASSEMBLY AND ASSEMBLY OF FUEL SYSTEM

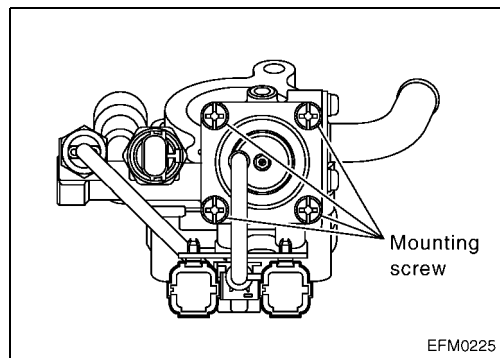
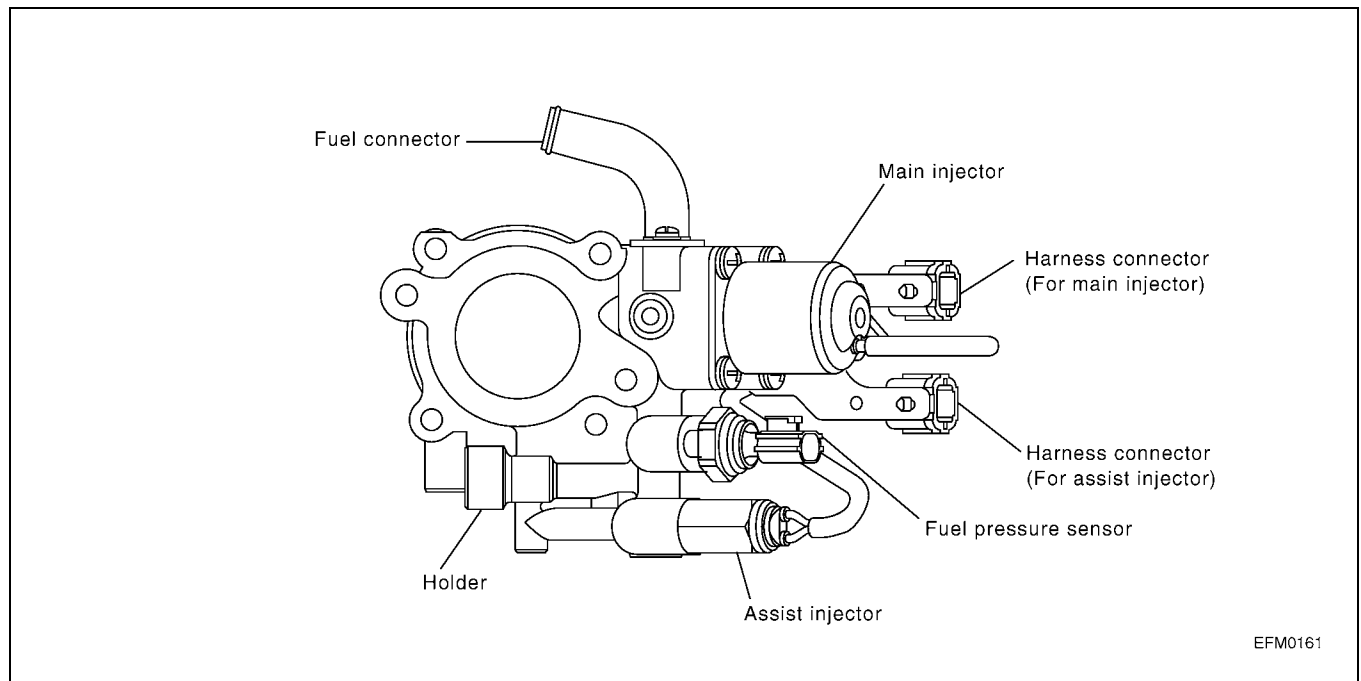
## LPG INJECTION SYSTEM



## LPG INJECTION SYSTEM DRIVE METHOD



## INJECTOR HOLDER ASSEMBLY



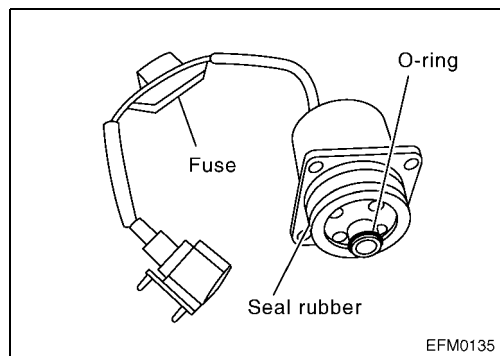
## LPG Fuel injector

### REMOVAL AND INSTALLATION

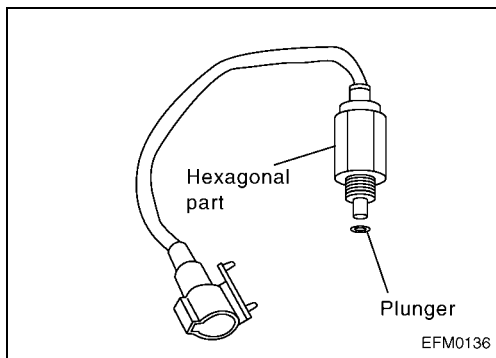
- Disassemble and assemble as shown in the figure.
- Install LPG fuel injector and check LPG leakage using soapy water after assembly.
- Insert straight and assemble O-ring and seal rubber on top after changing to new ones and applying engine oil to the circumference lightly.
  - O-ring may be damaged when tilting and inserting forcibly.
  - Do not use silicon oil when inserting.
  - Use correct injector specified for each engine type. (Check part number on fuel injector body label.)
  - Tightening torque of securing screw: 3.9 - 7.8 N·m (0.4 - 0.8 kg-m, 3 - 5 ft-lb)

### INSPECTION AND CLEANING

- Perform continuity test of harness connector.  
If it is approximately 1  $\Omega$  (at room temperature) with a tester, it is normal.  
If continuity should not exist, check for blown fuse.
  - If fuse is blown, replace it with proper fuse (5A). Check signal wave of related harnesses. When a non-standard signal flows, a malfunction may occur again.
- Clean injector.  
Clean injector from fuel inlet side with compressed air for approximately 5 minutes.
  - Do not use cleaner such as cab cleaner because it negatively affects rubber parts of inside.



# DISASSEMBLY AND ASSEMBLY OF INJECTOR HOLDER



## LPG Assist fuel injector

### REMOVAL AND INSTALLATION

- Rotate and remove hexagonal part of body using a spanner.
  - When removing hexagonal part of body, inside spring, plunger, and washer are removed together. Do not drop and lose them.
- Install after assembling inner components in their original position. Replace aluminum washer with new ones.
  - Tightening torque: 11.8 - 26.5 N·m (1.2 - 2.7 kg-m, 9 - 19 ft-lb)

### INSPECTION AND CLEANING

- If foreign materials such as tars are applied or collected on plunger or its inside, remove them with compressed air.

## LPG Fuel pressure sensor

### REMOVAL AND INSTALLATION

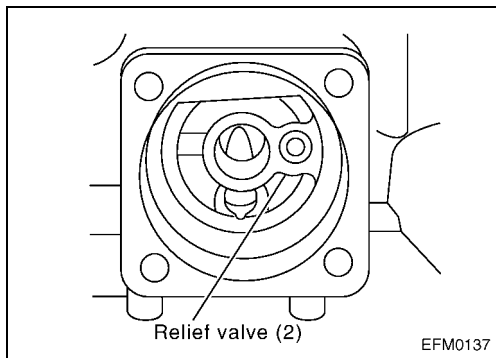
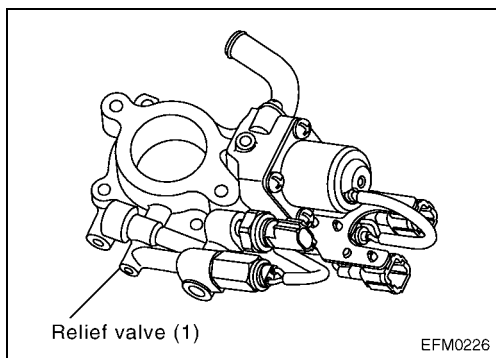
- If foreign materials are applied in the top, remove them with compressed air.
- Replace O-ring with a new one and apply engine oil to the circumference of O-ring lightly. And then, insert LPG fuel pressure sensor straight to holder and install.

### Relief valve (2 relief valves)

- 2 relief valves are built into holder.
- Relief valve (1) setting pressure is 0.08 MPa (0.78 bar, 0.8 kg/cm<sup>2</sup>, 11 psi).  
Relief valve (2) setting pressure is 0.12 MPa (1.18 bar, 1.2 kg/cm<sup>2</sup>, 17 psi).

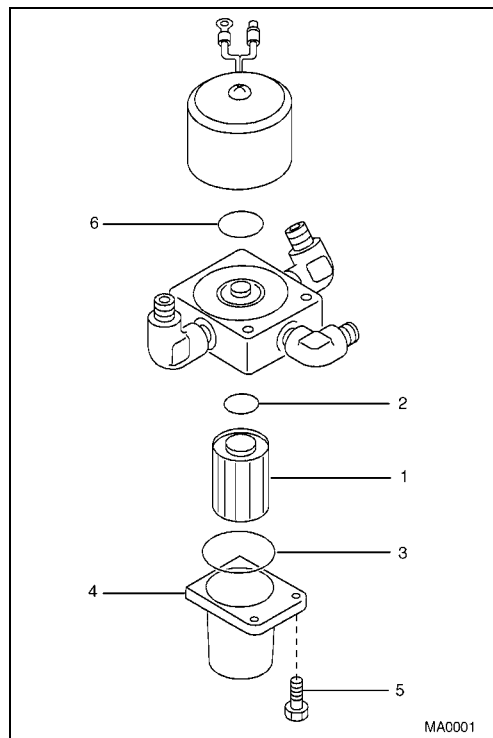
### INSPECTION AND CLEANING

- Seal necessary part of each holder.  
Apply compressed air from fuel connector.  
Raise air pressure from 0.00 MPa (0.0 bar, 0 kg/cm<sup>2</sup>, 0 psi) (gauge pressure) gradually. Check continuity of the passage at nearly above the setting pressure.  
Clean with compressed air up to 0.49 MPa (4.9 bar, 5 kg/cm<sup>2</sup>, 71 psi) if continuity should not exist.  
Replace holder with a new one if continuity should not exist after applying compressed air of 0.49 MPa (4.9 bar, 5 kg/cm<sup>2</sup>, 71 psi).
  - Do not replace relief valve only.





## DISASSEMBLY AND ASSEMBLY OF INJECTOR HOLDER



### Cleaning / Replacement of LPG filter of Valve assy solenoid LPG

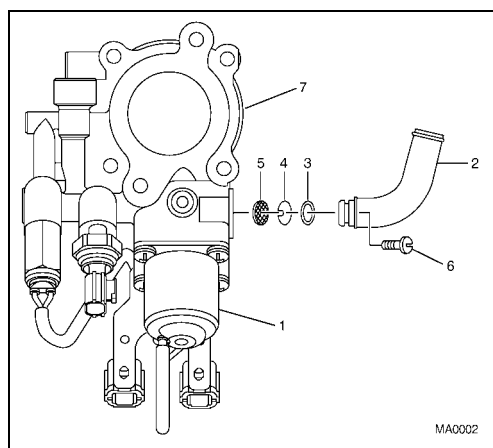
1. Disconnect LPG fuel tank
2. Loosen the filter-cap bolts ( item 5)



#### CAUTION:

**Caution:** LPG fuel may leak out when removing the filter-cap (item 4).

3. Remove LPG filter element (item 1)
4. Visually inspect the element status and clean if necessary.
  - **Note:** NFE recommends replacing the LPG filter element. Cleaning with air pressure can damage the element.
5. If the element is damaged, replace the element.
6. Before installing the filter and filter cap inspect visually the seals (item 2 and 3) and replace if necessary.
  - **Note:** Damaged seals (2-3) can cause LPG fuel leakage to the outside or reduced filter effect.
7. **After assembling inspect connections and piping for LPG fuel leakages.**



### Cleaning LPG filter screen in injector holder

1. Remove LPG fuel hose from vaporizer to injector holder.

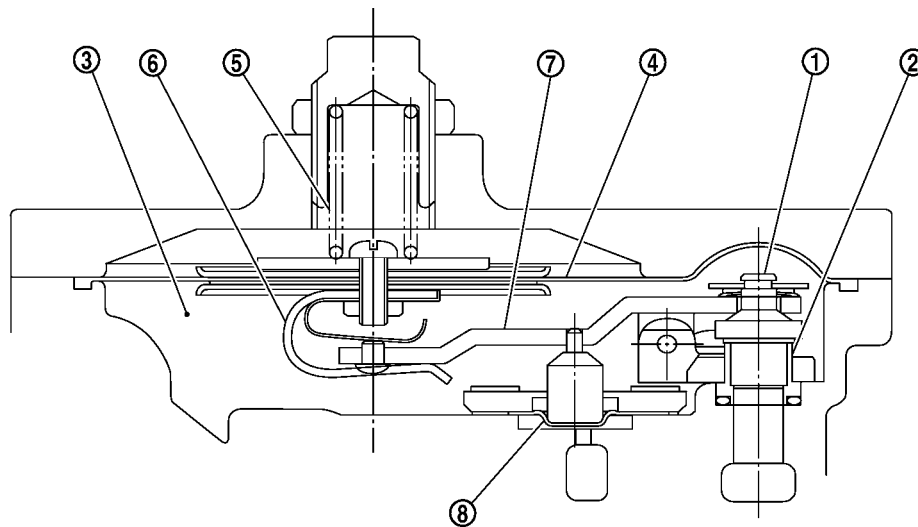


#### CAUTION:

**Caution:** LPG fuel may leak out when removing the fuel hose.

2. Loosen screws (item 6) and remove LPG fuel connector item 2) from LPG injector holder (item 7)
3. Remove the filter screen (item 5)
- 4.
5. Clean the screen filter with brake cleaner
6. If the filter is damaged or the contamination can not be proper removed, replace the filter screen.
7. Install filter screen and clip.
8. Before installing the LPG fuel connector( Item 2) visually inspect the o-seal (item 3) and replace if necessary.
  - **Note:** Damaged O-seal (3) can cause LPG fuel leakage to the outside.
9. **After assembling inspect connections and piping for LPG fuel leakages.**

## Vaporizer Mechanism and Operation



EFM0227

### PRIMARY (DECOMPRESSION) ROOM

- (1) Primary side valve
- (2) Primary side valve seat
- (3) Primary (decompression) room
- (4) Primary side diaphragm
- (5) Primary side diaphragm spring
- (6) Hook (claw)
- (7) Primary side valve lever
- (8) Balance diaphragm

Fuel is supplied from LPG tank to vaporizer via LPG solenoid valve. Fuel from solenoid valve is supplied to primary decompression room through primary side valve (1) and primary side valve seat (2).

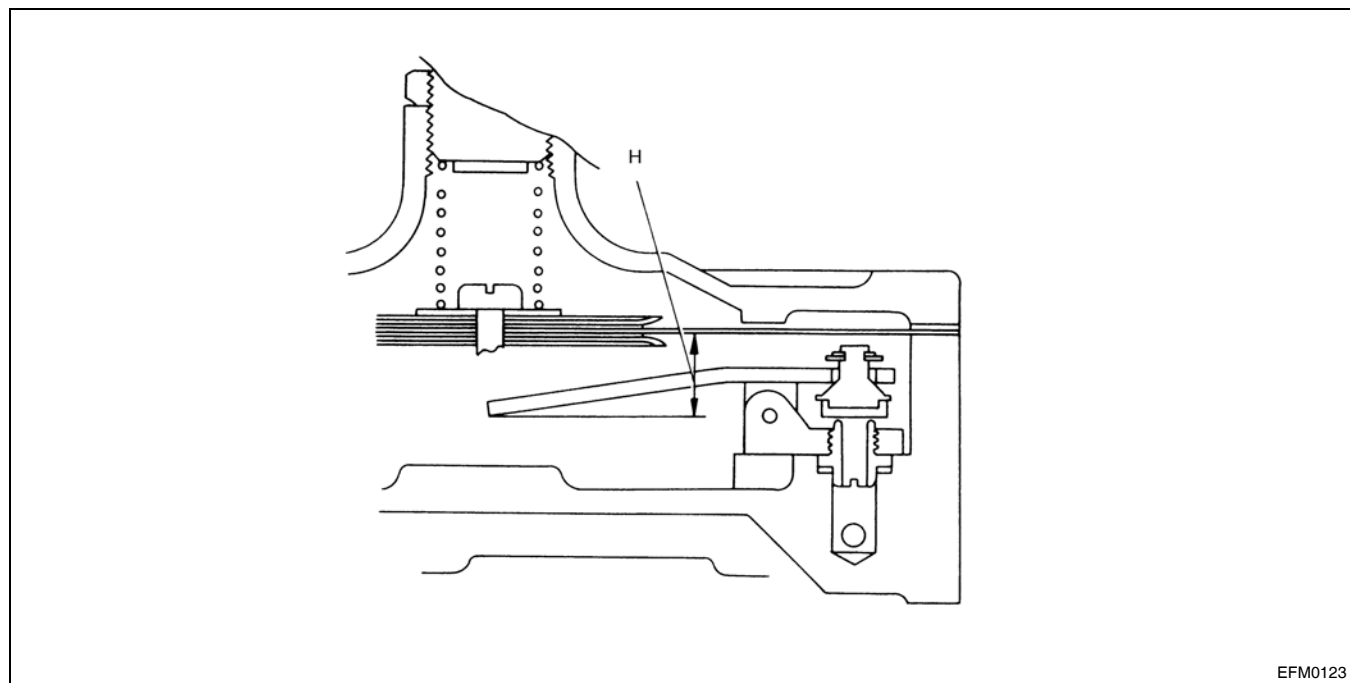
Fuel pressure supplied to primary room is 29 kPa (0.29 bar, 0.3 kg/cm<sup>2</sup>, 4 psi) or more. Primary diaphragm (4) pushes up diaphragm spring and hook (6) working together. It causes the operation that one side of primary valve lever (7) is lifted up. Therefore, the power that pushes primary valve (1) toward valve seat side (2) is increased, and fuel flow is cut off.

Primary diaphragm is pushed down by increasing the tension of diaphragm spring (5) higher than the fuel pressure when the fuel of primary room is consumed and the pressure of primary room inside is decreased to 29 kPa (0.29 bar, 0.3 kg/cm<sup>2</sup>, 4 psi) or less, and hook (6) is working together to push primary valve lever (7) down. Therefore, primary valve (1) opens and fuel flows in.

Repeat above operations to keep primary room pressure approximately 29 kPa (0.29 bar, 0.3 kg/cm<sup>2</sup>, 4 psi).

Variation of pressurization can be suppressed by balance diaphragm (8) even if pressure in LPG tank changes.

## Vaporizer Mechanism and Operation (Cont'd)



EFM0123

### PRESSURE INSPECTION

Check primary room pressure with the following procedure:

1. Remove primary room test hole plug, and install pressure gage using appropriate connector.
2. Start engine, and check for primary room fuel leakage at idle after warming up.  
Standard: 30.7 - 33.1 kPa (0.30 - 0.33 bar, 0.31 - 0.34 kgf/cm<sup>2</sup>, 4.4 - 4.8 psi)
3. Rotate pressure adjusting screw if measured pressure is outside the standard.



### CAUTION:

**Apply sealant and keep air tightness when reinstalling test hole plug.**

### IDLE ADJUSTMENT IN ELECTRIC CONTROLLED LPG SPECIFICATIONS

It is not necessary because it is performed with control unit.

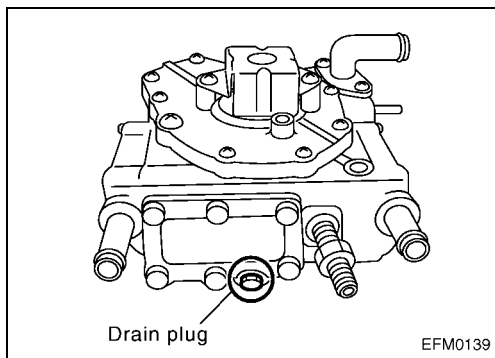
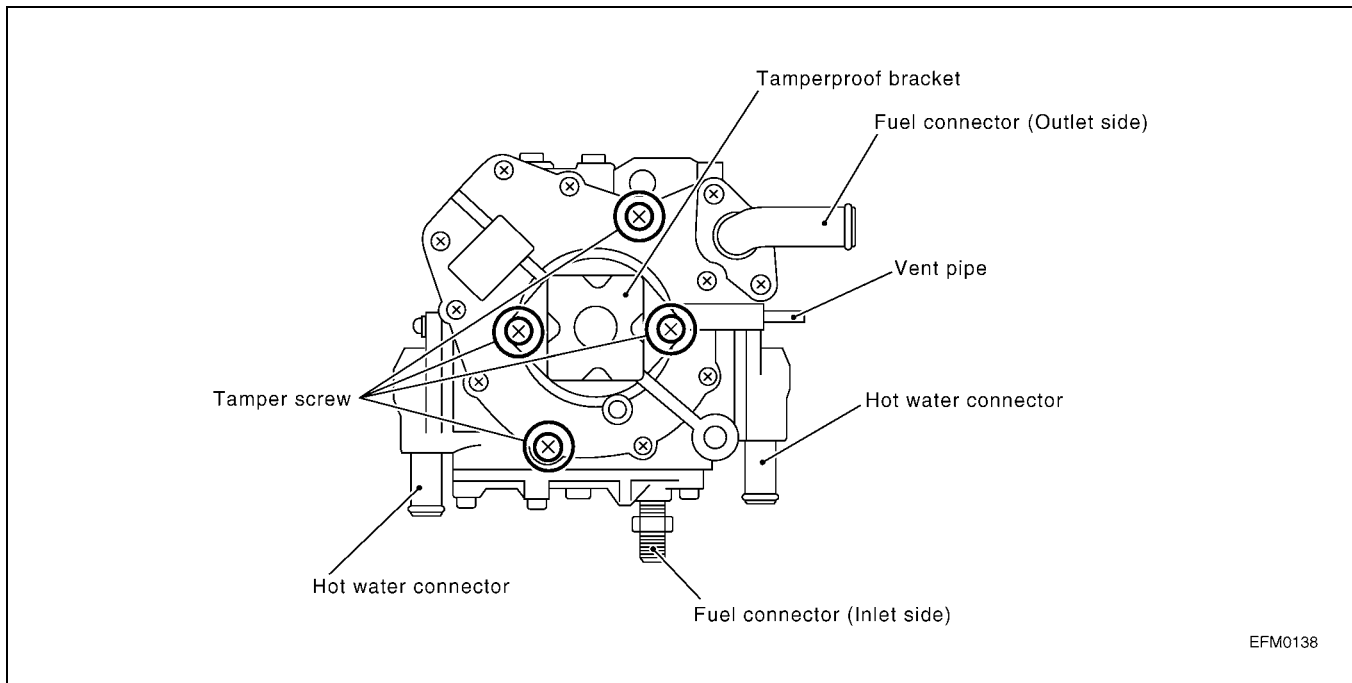
### REMOVAL OF IMPURITIES

LPG includes incombustible materials (e.g. tar).

These materials will be collected in vaporizer. This may cause operating malfunctions of fuel system.

It is necessary to periodically release and drain with engine warmed up.

### Tar drain, Removal, Installation, Disassembly and Inspection of Vaporizer



#### TAR DRAIN

- Start and warm up the engine using LPG.
- Close tank cock, and then consume LPG in fuel line.
- Remove drain plug, and then drain tar from vaporizer.
  - Put the tray below so as not to make engine room dirty.
- Apply sealant to drain plug and assemble after finishing work.
- Install LPG fuel injector and check LPG leakage using soapy water after assembly.

#### REMOVAL

- Close tank cock, and then consume LPG in fuel line.
- Disconnect battery cable at negative terminal.
- Drain coolants from radiator drain plug.
- Disconnect hot water hose. Use shop cloth and tray because water may come out.
- Disconnect vacuum hose.
- Disconnect fuel hose and fuel tube.
  - Handle each hose so that foreign materials do not enter the inside.  
Or, be careful to prevent each tube insertion part from being damaged.
- Remove mounting bolt to bracket of vaporizer.

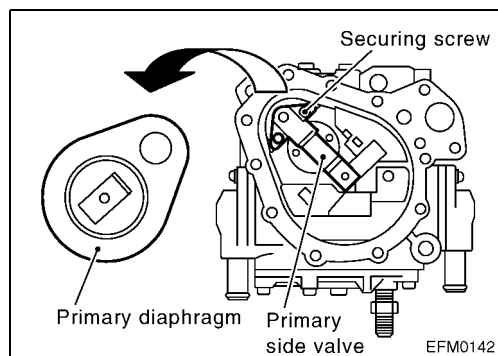
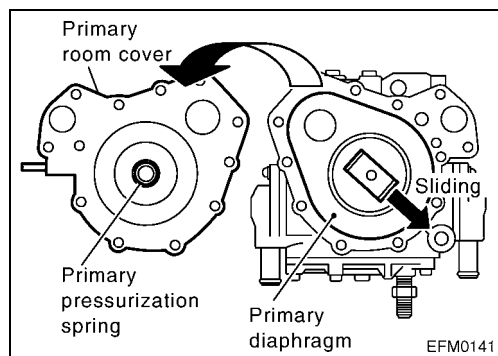
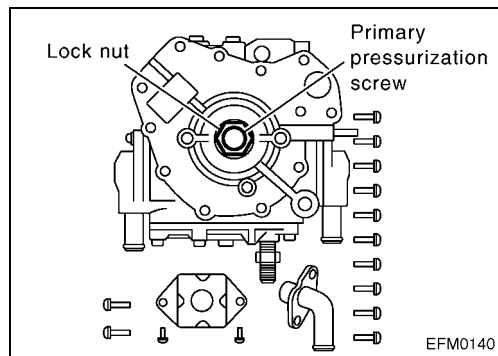
## Tar drain, Removal, Installation, Disassembly and Inspection of Vaporizer (Cont'd)

### INSTALLATION

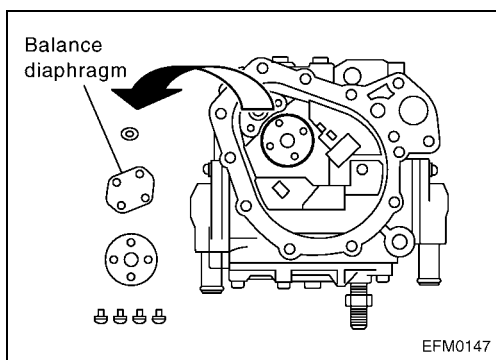
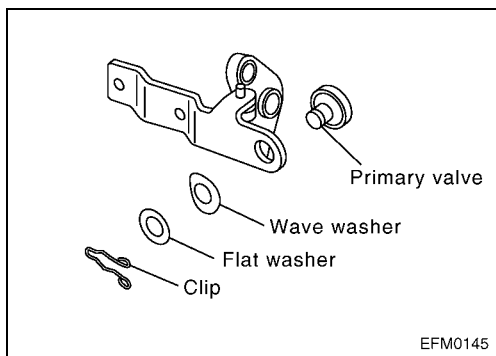
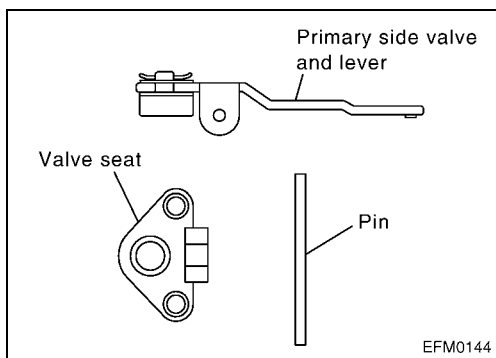
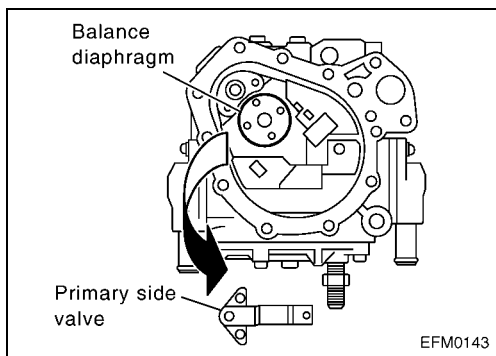
- Install in the reverse order of removal.
- Install vaporizer bracket.  
Tightening torque: 16 - 21 N·m (1.6 - 2.1 kg-m, 12 - 15 ft-lb)
- Connect each hose and tube.
  - Securely tighten each clamp.
- Connect battery cable at negative.
- Check LPG leakage.  
Start the engine and apply soapy water to each connection of vacuum hose and drain plug. Check for LPG leakage.  
Apply soapy water to mating surface of case and cover. Check for LPG leakage.

### DISASSEMBLY OF PRIMARY CHAMBER SIDE

- Remove mounting screws (2) of bracket for tamperproof using SST.
  - Remove primary adjusting screw lock nut (WAF: 23 mm (0.91 in)).
  - Remove primary adjusting screw.
  - Remove primary chamber cover screws (2) using SST.
  - Remove other screws (8) using commercial service tool.
  - Remove fuel connector (inlet side) screws (2) using commercial service tool.
- 
- The figure shows the condition that primary chamber cover is removed.  
Be careful not to lose primary pressurization spring that is on back of cover when removing.
- 
- The figure shows the condition that primary chamber cover is removed.  
Remove the diaphragm while sliding it in the arrow direction shown in the figure.
  - Check primary diaphragm for breakage or damage. Replace if necessary.



### Tar drain, Removal, Installation, Disassembly and Inspection of Vaporizer (Cont'd)



- The figure shows the condition that lever and valve seat are removed.

When removing lever mounting screws (2) shown in the above figure, lever and valve seat can be removed as a set. Do not lose the lever because it is fixed with only the pin.

- The figure shows the condition that valve lever, valve seat and pin are removed.

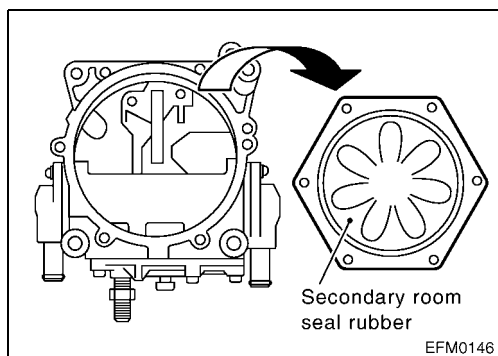
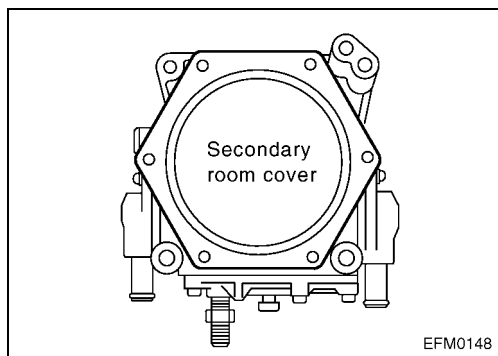
- Furthermore, the figure shows the condition that valve is removed.

- The figure shows the condition that balance diaphragm is removed. Balance diaphragm can be removed by loosening 4 screws of plate.

## Tar drain, Removal, Installation, Disassembly and Inspection of Vaporizer (Cont'd)

### DISASSEMBLY OF SECONDARY CHAMBER SIDE

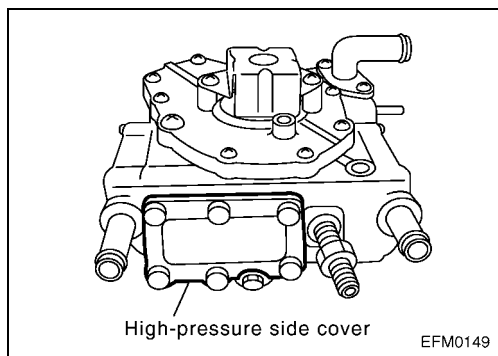
- The figure shows that secondary chamber side is assembled.
- Secondary chamber cover is fixed by 6 screws. Secondary chamber cover can be removed by loosening each screw.



- The figure shows the condition that secondary chamber cover is removed.

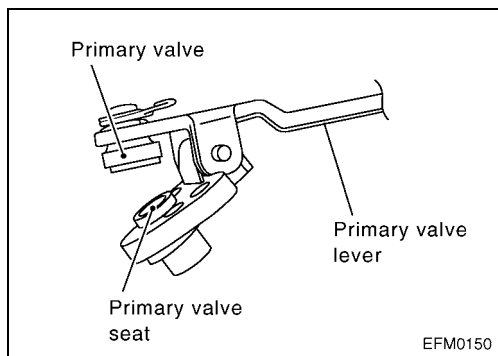
### DISASSEMBLY OF HIGH-PRESSURE SIDE COVER

- Loosen and remove high-pressure side cover mounting screws (8).



### INSPECTION OF PRIMARY SIDE VALVE

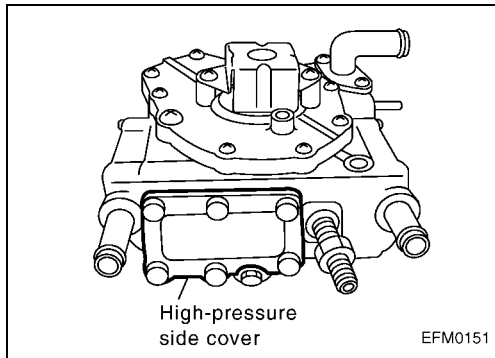
- Check around primary side valve and valve seat.
- Check valve lever for smooth operation.
- Check valve and lever assembly if necessary.



### INSPECTION OF DIAPHRAGM

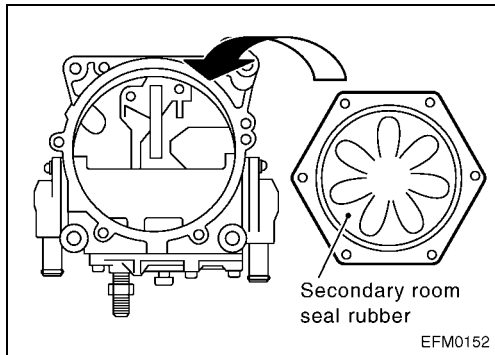
- Check for cracks, damage and hardening.
- Replace each diaphragm if necessary.

## Tar drain, Removal, Installation, Disassembly and Inspection of Vaporizer (Cont'd)



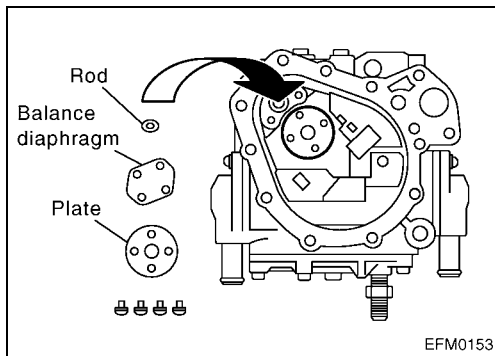
### ASSEMBLY OF HIGH-PRESSURE SIDE COVER

- Clean disassembled parts completely.
- Clean filter from inside with compressed air.
- Replace O-ring with a new one.
- Tighten mounting bolts (6) evenly.
- Tightening torque N·m (kg-m, ft-lb): 6.3 - 8.3 (0.64 - 0.85, 5 - 6)



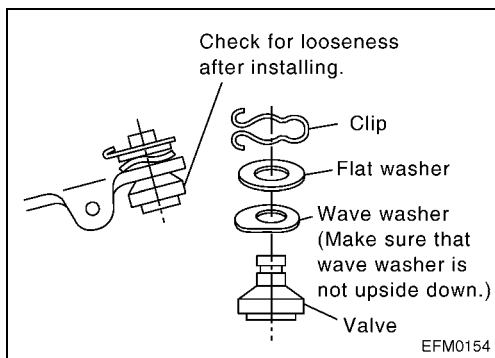
### ASSEMBLY OF SECONDARY CHAMBER SIDE

- Clean disassembled parts other than seal rubber completely.
- Replace seal rubber with a new one.  
Securely insert circumference O-ring of seal rubber into groove.
- Gently place secondary chamber cover (steel), and then install with securing screws (6).
- Tightening torque N·m (kg-m, ft-lb): 3.8 - 5.1 (0.39 - 0.52, 2.8 - 3.7)



### ASSEMBLY OF PRIMARY CHAMBER SIDE

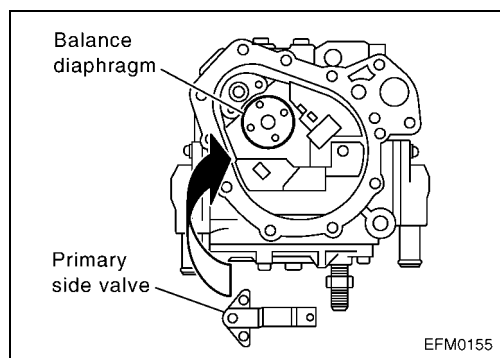
- Clean disassembled parts other than diaphragm completely.
- Set balance diaphragm and plate in this order, and then secure them using screws.
- Tightening torque N·m (kg-m, ft-lb): 1.0 - 2.9 (0.1 - 0.3, 1 - 2)
- Lastly, put the rod on center.  
Top convex side faces to lever side.



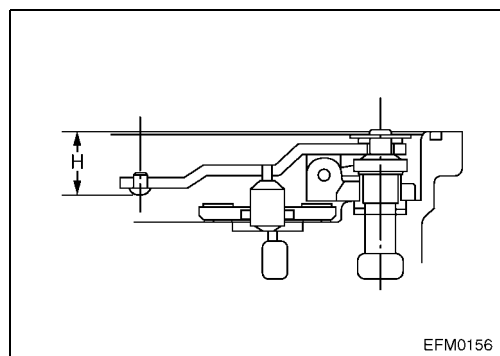
- Assemble primary side valve.
- Clean disassembled parts completely.
- Install valve to lever as shown in the figure.
- Face convex part of wave washer to clip side.
- Check for looseness after installing.  
Bend and adjust the wave washer if necessary.



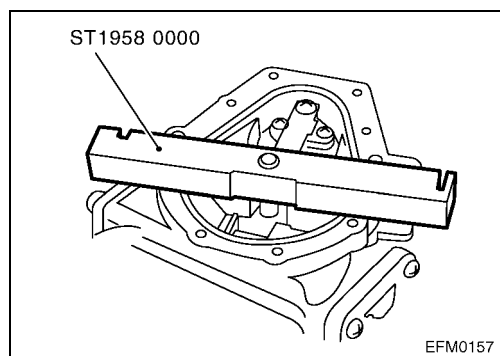
### Tar drain, Removal, Installation, Disassembly and Inspection of Vaporizer (Cont'd)



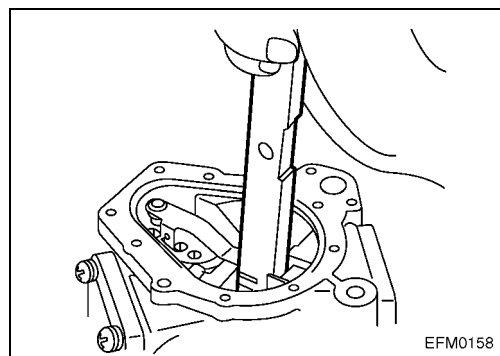
- Assemble primary side valve.
- Replace O-ring with a new one.
- Tightening torque N·m (kg-m, ft-lb): 1.0 - 2.9 (0.1 - 0.3, 1 - 2)



- Measure dimension H of lever.



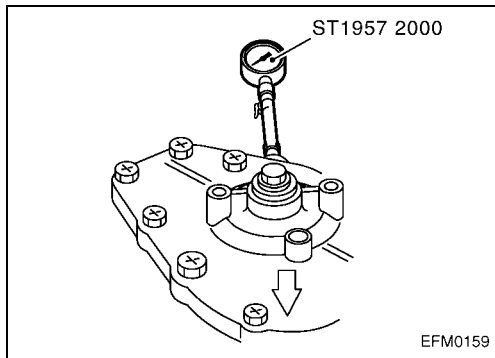
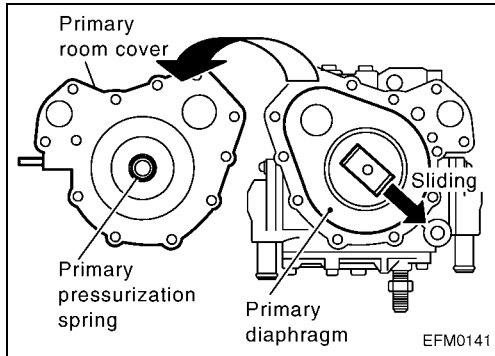
- Measure dimension H using vaporizer height gauge (SST).
- Measure while inserting L-part of height gauge into tip of lever.  
Standard: 13.6 - 14.1 mm (0.535 - 0.555 in)



- If it is outside the standard, insert both end grooves of vaporizer height gauge (SST) into lever, and then bend and adjust the lever.

**CAUTION:**  
Be careful not to damage valve.

### Tar drain, Removal, Installation, Disassembly and Inspection of Vaporizer (Cont'd)



- Check primary valve airtightness.
- (1) Put vaporizer into oil tank. Apply air pressure of 0.29 - 0.49 MPa (2.9 - 4.9 bar, 3 - 5 kg/cm<sup>2</sup>, 43 - 71 psi) from fuel inlet connector.
- (2) Under the above condition, close primary valve by pulling primary valve lever by hand, and then make sure that air does not leak from primary valve and O-ring.

- In the reverse order of disassembly, place primary diaphragm over the body, slide it to the center, and then secure primary diaphragm.
- Place primary chamber cover over the body.  
(At this time, be careful not to drop primary adjusting spring from primary chamber cover.)
- Tighten 2 screws of mounting bolts using SST, and then tighten the other 8 screws using commercial service tool.
- Tightening torque N·m (kg·m, ft·lb): 3.8 - 5.1 (0.39 - 0.52, 2.8 - 3.7)

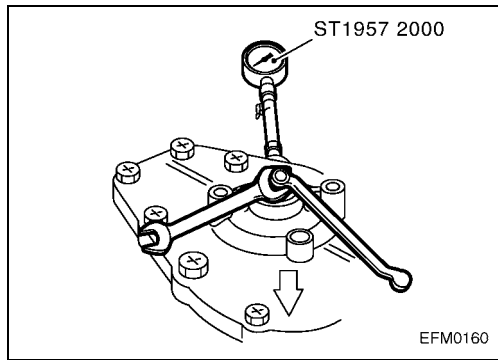
- Perform primary chamber adjustment.
- Remove plug of primary oil pressure output port, install adopter (SST), and then set LPG pressure gauge (SST).
- Install #100 JET to fuel outlet connector. (Flow: approx. 10L/min)
- Apply air pressure of 0.29 MPa (2.9 bar, 3 kg/cm<sup>2</sup>, 43 psi) from fuel inlet connector.  
Standard: 32.1 - 33.5 kPa (0.32 - 0.33 bar, 0.327 - 0.342 kg/cm<sup>2</sup>, 4.6 - 4.8 psi)
- If the value is outside the standard, adjust it as described below.

Adjust primary chamber with the following procedure if adjustment with vaporizer only is difficult.

- Install vaporizer to the vehicle.
- Remove plug of primary oil pressure output port, install adopter (SST), and then set LPG pressure gauge (SST).
- Start and warm up the engine.
- Check pressure of pressure gauge at idle after warming up.  
Standard: 30.7 - 33.1 kPa (0.30 - 0.33 bar, 0.313 - 0.338 kg/cm<sup>2</sup>, 4.4 - 4.8 psi)
- If the value is outside the standard, adjust it as described below.
  - Vaporizer primary pressure setting value is different between the unit condition and the condition of installing vaporizer to engine and having hot water flowing (approximately 80 °C (176 °F)).

## DISASSEMBLY AND ASSEMBLY OF VAPORIZER

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- Tighten lock nut after setting to standard pressure by rotating primary pressure adjusting screw.
- Tighten primary pressure adjusting screw using double spanner.
- Tightening torque N·m (kg-m, ft-lb): 11.8 - 26.5 (1.2 - 2.7, 9 - 19)
- Apply soapy water to mating surface of cover. Check for leakage.
- Place tamperproof bracket over primary chamber cover, and then tighten mounting screw using SST.
- Tightening torque N·m (kg-m, ft-lb): 3.8 - 5.1 (0.39 - 0.52, 2.8 - 3.7)